To: Rodriguez, Dante[Rodriguez.Dante@epa.gov]
From: Jeryl Gardner
Sent: Tue 7/28/2015 9:19:01 PM
Subject: RE: Draft Wabuska Drain RI Work Plan - CSM & DQOs
removed.txt

Hi Dante,

How was your backpacking trip?

I'm in the office more or less this week if you want to call to discuss OU-7.

Thanks,

Jeryl R. Gardner, P.E., C.E.M.

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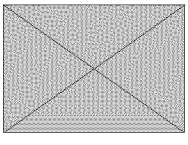

From: Rodriguez, Dante [mailto:Rodriguez.Dante@epa.gov]
Sent: Friday, July 24, 2015 2:13 PM
To: Oman, Jack
Cc: Jeryl Gardner; Ginny Hatch; Dietrick McGinnis; Sarah Peters (peters@mcginnisandassociates.com); Cynthia Oceguera (CynthiaO@wrpt.us); 'Zimmerman, Chuck'; Davis, Greg; Alma Feldpausch; Tull, James; Black, Ned
Subject: Draft Wabuska Drain RI Work Plan – CSM & DQOs

Jack,

Thank you for working with the agencies on the Wabuska Drain (OU7) investigation. All stakeholders have repeatedly requested that the project team move the project along faster. To address this request, EPA is attempting an expedited, collaborative approach to the OU7 investigation.

We have reviewed the CSM/DQO document (*"Draft Wabuska Drain (OU-7) Remedial Investigation Work Plan – Conceptual Site Model and Data Quality Objectives, Yerington Mine Site,"* dated July 14, 2015) and discussed it with your team on the July 23, 2015, conference call. In order to proceed with this expedited, collaborative approach, please do the following:

- Proceed with preparing a Field Sampling Plan for the work along the first reach of the drain, aiming for delivery by mid-September.

- Revise Figure 1-3, if determined appropriate by CH2M Hill and Brown & Caldwell staff assigned, and resubmit.

- Revise and resubmit Figure 3-1 to address specific comments below, as discussed on our 7/23 call).

- Work with the project team to schedule a planning meeting for September, to discuss subsequent work activities (including but not limited to sampling at YPT reservation), decision rules, decision flow charts, etc.

Note that EPA is not directing you to revise the referenced document (other than the two figures noted). In this expedited, collaborative approach, we will utilize letters like this as well as the other formal comment letters to document the various technical opinions that enter into the discussion. In this regard, the following technical comments serve to document points raised during the 7/23 call.

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TECHNICAL COMMENTS

Section 1-4

- **Vadose/pathway to groundwater** – the OU7 RI will need to include a certain amount of data and interpretation regarding the Wabuska Drain's impact on groundwater. Agency and tribal consultants will review the background groundwater quality report and look for information that should be included in an OU7 RI.

- **Phase I/Phase II** – It is EPA's position that further work will be required beyond that

described in the subject CSM/DQO report.

- **Figure 1-3** – Staff from CH2M Hill (Ilka Dinkelman) and Brown & Caldwell (Penny) will discuss and resolve the depiction of the historic drain alignments. If revisions to the figure are made, submit the revised figure to the team.

- **Figure 3-1** – Make the following changes and resubmit the figure:

o Footnote #1 incorrectly states that surface and groundwater transport is limited to dissolved phase constituents. Surface water transport of contaminated sediments is also a transport pathway. Correct this note.

o Flow from the drain into the wetlands should be depicted.

o In depicting the historic drain alignments, use solid lines for alignments during mine operations timeframes and dashed lines for post-closure timeframes.

- **Figure 5-1** – Note #6 says that plant uptake is for dissolved constituents only. A question to consider is how we will measure the constituents in soil moisture or what assumptions we would make about this factor.

Section 6

- **Data Gaps** – the texts states that data needs include frequency of human contact with surface water. It was discussed that generic assumptions regarding this factor do not exist, so we would need to make assumptions based on proximity. Alma expressed the desire to learn more about proximity of residences to the drain during her site visit and by speaking with neighbors.

- The last sentence in Section 6, says that given the data gaps, it is premature to define the data gaps, but the data gaps would be defined in the RI. Greg clarified that the intent was to say that the data gaps will be refined as the investigation proceeds – known gaps will be filled and new gaps may be identified as the investigations iteratively fill the gaps.

Section 7

- **Screening assessment tool** – the report states that a risk-based screening assessment will be conducted using the Phase I data. It was clarified that PRGs will be used to compare against field data.

- **Data Gaps:**

o Table 7-1, Step 5 "Analytical Approach," the second to last bullet states that data gaps would be identified that are relevant to quantifying potential risk and assessing appropriate remediation. This list should also include data gaps relevant to determining extent of contamination.

o In DQO#2, Step #3, under Principal Geochemical Inputs, it says that we need sufficient data

to statistically differentiate areas affected by different sources (mining, agriculture, etc), but it says that data requirements and procedures will be defined in RI. We discussed and clarified it meant that the statistical method to be used to evaluate the data will be selected once the data is obtained.

o With regards to differentiating agricultural impacts from mining impacts, the point was raised that agricultural wells that used mine-contaminated water could have concentrated mine-related constituents in the agricultural fields. In addition, soil amendments also would have introduced a variety of constituents into the agricultural soil. These are just two of the many reasons why it will be difficult to differentiate mining impacts from agricultural impacts.

Overall

- **Extent of Phase I:**

o For surface water, the importance of installing devices to measure flows was expressed. Greg will visit the YPT reservation with Dietrick to examine the devices they are currently using.

o The extent of the initial sampling was discussed. Greg will proceed with writing the Field Sampling Plan for the first reach of the drain, with the aim of submitting it in September. Also in September, the project team will meet to plan the sampling for the next reaches of the drain, devise a decision flow chart, device decision rules, etc.

- **Role of DQO documents** – EPA expressed that it does not consider the subject document to replace EPA's October 2014 DQO document, merely to focus on Phase I activities.

- **Peripheral components** – these components, described in EPA's October 2014 DQO document, are related to the pump-back system (2 pump houses, a pump foundation). EPA expressed its desire to add the investigation of these components to the discussions about further investigatory work.

Dante Rodriguez

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